Compatibility of ZMC with AWS Storage Gateway

Why AWS with Zmanda 3.6?

Tapes are found to be one of the most reliable backup and disaster recovery solutions. Tapes are one of the most durable solutions for this problem. It is not very often that a disaster occurs in an enterprise and it is highly imperative that backup storage devices have a long lifespan and tapes are claimed to have a lifespan of around 30 years. Tapes are also found to be secure, cost effective and portable compared to other backup solutions like cloud services and disks.

However, physical tapes are very old, and they can be a hindrance in terms of wasting valuable operational time, capital, and flexibility. It is due to these reasons that AWS Storage Gateway is being offered as an effective solution and Zmanda 3.6 is found to be compatible with this latest technology.

How To Configure AWS Storage Gateway with ZMC

To know how to install ZMC, follow this article. Just follow these simple steps on the server where ZMC is installed to configure AWS Storage Gateway with ZMC.

1. Install iSCSI-initiators-utils
   # yum install iscsi-initiator-utils

2. Make sure that the iSCSI daemon is running
   # sudo /etc/init.d/iscsi status (Rhel/Centos 5/6)
   # sudo service iscsid status(Rhel/Centos 7)

3. If the iSCSI daemon is inactive, it needs to be started
   # sudo /etc/init.d/iscsi start (Rhel/Centos 5/6)
   # sudo service iscsid start(Rhel/Centos 7)
4. Discover the volume or VTL device targets defined for a gateway

```
# sudo /sbin/iscsiadm --mode discovery --type sendtargets --portal [GATEWAY_IP]:3260
```

```
[root@prashanth vm ~]# sudo /sbin/iscsiadm --mode discovery --type sendtargets --portal 192.168.53.47:3260
```

5. Connect to a target

```
# sudo /sbin/iscsiadm --mode node --targetname iqn.1997-05.com.amazon:[ISCSI_TARGET_NAME] --portal [GATEWAY_IP]:3260,1 --login
```

```
[root@prashanth vm ~]# sudo /sbin/iscsiadm --mode node --targetname iqn.1997-05.com.amazon:sgw-le5cb077-tapedrive-10 --portal 192.168.53.47:3260,1 --login
```

6. There are two things to keep in mind during configuration.
   a. Media changer and tape drives need to be connected to using the previous command before being able to use them.
   b. The default block size of data sent for backup is set to 32kB but must be changed to 65kB in the amanda.conf file. The following line must be appended in the amanda.conf file.

   ```
   device-property "BLOCK_SIZE" "65k"
   ```

7. Use the lsscsi –g command, this command gives the user a list of scsi devices connected to the system. The first entry on each line is the scsi_host, channel, target_number, and LUN tuple. These entries are placed in brackets and each element is colon separated. During configuration, the medium changer must have the least number of all.

```
[quaser@ZMUSLABL-Q640 ~]$ lsscsi -g
[0:0:0:0] disk VMware Virtual disk 1.0 /dev/sda /dev/sd0
[1:0:0:0] cd/dvc NECVMWare VMware IDE CDR30 1.00 /dev/sr0 /dev/sd1
[8:0:0:0] medium AWS Gateway-VTL 0100 /dev/sd0 /dev/sd4
[9:0:0:0] tape IBM ULT3580-TD5 0103 /dev/st0 /dev/st0
[10:0:0:0] tape IBM ULT3580-TD5 0103 /dev/st1 /dev/st3
[quaser@ZMUSLABL-Q640 ~]$
```
8. Once the above steps are followed, refer to this documentation to proceed with labelling of tapes. Once labelling is successful, a given DLE can be bound to tapes on AWS, to be the end storage device.